

Due to continuing improvements, actual product may differ slightly from the product described herein.



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> TO PREVENT SERIOUS INJURY, READ AND UNDERSTAND ALL WARNINGS AND INSTRUCTIONS BEFORE USE.

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PRODUCT SPECIFICATIONS

Item	Description
Electrical Requirements	120 VAC / 60 Hz / 15 Amps
	2.5 HP Motor / 16,500 RPM / 2-Speed
	Cuts Per Minute: 11,000
	Power Switch: Toggle ON/OFF Switch Type with Safety Key
	Circuit Breaker: 20 Amps / Push Button to Reset
	Power Cord: SJT 14 AWG x 3C / 6'9" Long
	Power Plug: 3-Prong / Grounded
Stock Capacity	6" High x 15" Wide
Maximum Cutting Depth	Up to 3/32"
Feed Rate	11 or 22 Feet Per Minute
Number of Cutting Knives	2
Dust Port Dimensions	2-5/8" High x 2-1/4" Outside Diameter
Features	Auto-Feed Mode & Manual Mode / Motor Overload Protection
	Depth of Cut Gauge / Workpiece Thickness Pre-Set Gauge
	Built-In Dust Collector / Top Mounted Rollers for Workpiece Return
	Infeed & Outfeed Tables with Rollers
Accessories	Hex Wrench (Qty. 1) / Square Box Wrench (Qty. 1)
	Open End Wrench (Qty. 1) / Magnets (Qty.2) / Dust Bag (Qty. 1)
Overall Dimensions	38" Long x 32-1/2" Wide x 25" High
Unit Weight	150 Pounds

SAVE THIS MANUAL

You will need this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep this manual and invoice in a safe and dry place for future reference.

GENERAL SAFETY RULES

WARNING! READ AND UNDERSTAND ALL INSTRUCTIONS Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury. SAVE THESE INSTRUCTIONS

WORK AREA

- 1. **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.
- 2. Do not operate the Planer in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power equipment creates sparks which may ignite the dust or fumes.
- 3. **Keep bystanders, children, and visitors away while operating power equipment.** Distractions can cause you to lose control. Protect others in the work

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area from debris such as chips and sparks. Provide barriers or shields as needed. Children and visitors should never be in the work area.

ELECTRICAL SAFETY

- 1. Grounded tools must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. If the tools should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.
- 2. Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators. There is an increased risk of electric shock if your body is grounded.
- 3. **Do not expose power tools to rain or wet conditions.** Water entering power equipment will increase the risk of electric shock.
- 4. Do not abuse the Power Cord. Never use the Power Cord to pull the Plug from an outlet. Keep the Power Cord away from heat, oil, sharp edges, or moving parts. Replace damaged Power Cords immediately. Damaged Power Cords increase the risk of electric shock.

PERSONAL SAFETY

- 1. Stay alert. Watch what you are doing, and use common sense when operating the Planer. Do not use the tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
- 2. Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
- 3. **Use the right product for the job.** Do not attempt to force small equipment to do the work of larger industrial equipment. There are certain applications for which this product was designed. It will do the job better and safer at the rate and capacity for which it was designed. Do not modify this product, and do not use this product for a purpose for which it was not designed.
- 4. Avoid accidental starting. Be sure the Power Switch is off before plugging

in. Plugging in power equipment with the Power Switch on, invites accidents.

- 5. **Remove adjusting keys or wrenches before turning the power tool on.** A wrench or a key that is left attached to a rotating part of the Planer may result in personal injury.
- 6. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the Planer in unexpected situations.
- 7.

Use safety equipment. Always wear ANSI-approved safety impact eye goggles. Dust mask or respirator, and hearing protection must be used for appropriate conditions.

TOOL USE AND CARE

- 1. **Do not force the Planer. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
- 2. **Do not use the Planer if the Power Switch does not turn it on or off.** Any tool that cannot be controlled with the Power Switch is dangerous and must be replaced.
- 3. **Disconnect the Power Cord Plug from the power source before making any adjustments, changing accessories, or storing the Planer.** Such preventive safety measures reduce the risk of starting the tool accidentally.
- 4. **Store idle tools and equipment out of reach of children and other untrained persons.** Tools and equipment are dangerous in the hands of untrained users.
- 5. **Maintain this product with care. Keep the Planer and its Tables clean and in proper working order.** Properly maintained tools and equipment are easier to control. Do not use damaged tools and equipment. Tag damaged tools and equipment "Do not use" until repaired.
- 6. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the Planer's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
- 7. Use only accessories that are recommended by the manufacturer for your **model.** Accessories that may be suitable for one product may become hazard-ous when used on another product.

SERVICE

- 1. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
- 2. When servicing a tool, use only identical replacement parts. Follow instructions in the *"Inspection, Maintenance, And Cleaning"* section of this manual. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

SPECIFIC SAFETY RULES

- 1. **Maintain labels and nameplates on the Planer.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- 2. **Avoid unintentional starting.** Make sure you are prepared to begin work before turning on the Router.
- 3. **Do not force the Planer.** This tool will do the work better and safer at the speed and capacity for which it was designed.
- 4. **WARNING! Keep hands and fingers away from the cutting area.** Use a "push stick" (not included) when necessary.
- 5. Make sure the Planer is used on a dry, flat, level, sturdy workbench surface capable of supporting the weight of the unit, accessories, and workpieces.
- 6. **Never leave the Planer unattended when it is plugged into an electrical outlet.** Always unplug the unit from its electrical outlet before leaving.
- 7. Industrial applications must follow OSHA guidelines.
- 8. **Never stand or sit on the Planer.** Serious injury could result if the unit is tipped.
- 9. Always unplug the Planer from its power supply source before performing any inspection, maintenance, or cleaning procedures.
- 10. Keep all guards in place and in proper working order.
- 11. Allow the Planer Knives to spin up to full speed before feeding a workpiece into the unit. When turning off the Planer, allow the Knives to spin down and stop on their own. Do not press against the Knives to stop them.

- 12. Turn off the Planer and allow the unit to stop on its own if the workpiece is to be backed out of an uncompleted cut.
- 13. Never attempt to remove material stuck in the moving parts of the Planer while it is plugged in and running.
- 14. When cutting a large workpiece (over 24" long), make sure its entire length is properly supported. If necessary, use a roller stand (not included) with larger workpieces.
- 15. Make sure the Tables are clear with the exception of the workpiece to be cut.
- 16. **The Planer is designed for cutting flat workpieces only.** Do not attempt to cut workpieces that are not flat.
- 17. **The Planer is designed for cutting wood workpieces only.** Do not attempt to use the Planer to cut metal or other nonwood materials.
- 18. Always make sure the work surface of the Planer is clean and free of dust, wood chips, and other debris that can interfere with the cut you are going to make.
- 19. Always keep children and other unauthorized people away from the Planer. Unplug the Table, and remove the Power Switch's Safety Key when the Planer is not in use.
- 20. **Avoid overloading the Planer.** If the motor speed drops abnormally, decrease the cutting depth of the workpiece immediately.
- 21. **Use the right tool for the job.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this tool, and do not use this tool for a purpose for which it was not intended.
- 22. **Always use sharp Planer Knives**. If the Knives stop abruptly, or the Knives become blocked, turn the unit's Power Switch to its "**OFF**" position immediately.
- 23. Do not attempt to plane material less than 7/64" thick, thicker than 6-1/4", or wider than 15".
- 24. Before planing any workpiece, check for any foreign material such as nails, screws, or hard impurities in the wood. Also check for loose knots in the workpiece.

25. Always stand off to one side of the Planer when in use.

26. Do not reach across the Planer when it is on.

- 27. **MARNING!** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contain chemicals known (to the State of California) to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are: lead from lead-based paints, crystalline silica from bricks and cement or other masonry products, arsenic and chromium from chemically treated lumber. Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. *(California Health & Safety Code 25249.5, et seq.)*
- 28. **WARNING!** People with pacemakers should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.
- 29. **WARNING!** The warnings and cautions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

SAVE THESE INSTRUCTIONS

GROUNDING

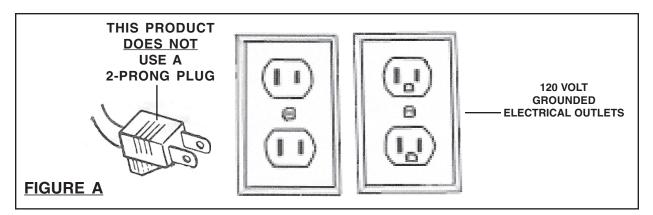
Improperly connecting the grounding wire can result in the risk of electric shock. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

DOUBLE INSULATED TOOLS: TOOLS WITH TWO PRONG PLUGS

1. Tools marked "Double Insulated" do not require grounding. They have a special

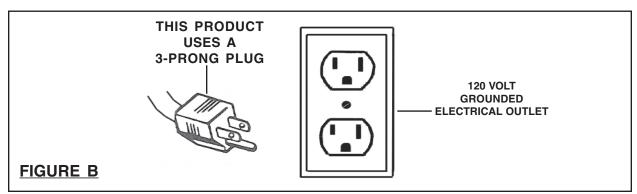
double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the National Electrical Code. **(See Figure A.)**

2. Double insulated tools may be used in either of the 120 volt outlets as shown in the following illustration. (See Figure A.)



GROUNDED TOOLS: TOOLS WITH THREE PRONG PLUGS

- 1. Tools marked with "Grounding Required" have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. (See Figure B.)
- 2. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool's grounding system and must never be attached to an electrically "live" terminal. **(See Figure B.)**
- 3. The Planer must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the following illustration. (See Figure B.)



SYMBOLOGY

		Double insulated	
	SP	Canadian Standards Association	
		Underwriters Laboratories, Inc.	
	V ~	Volts Alternating Current	
	Α	Amperes	
	ⁿ o <u>xxxx</u> /min.	No Load Revolutions per Minute (RPM)	
FIGURE C			•

UNPACKING

When unpacking, check to make sure all the parts shown on the **Parts Lists on pages 19 20, 21, and 24** are included. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

ASSEMBLY INSTRUCTIONS

NOTE:

For additional information regarding the parts listed in the following pages, refer to the **Assembly Diagrams on pages 22, 23, and 24**.

1. **CAUTION!** Always make sure the Power Switch (14A) of the Planer is in its "**OFF**" position and the unit is unplugged from its electrical outlet prior to performing any assembly procedures.

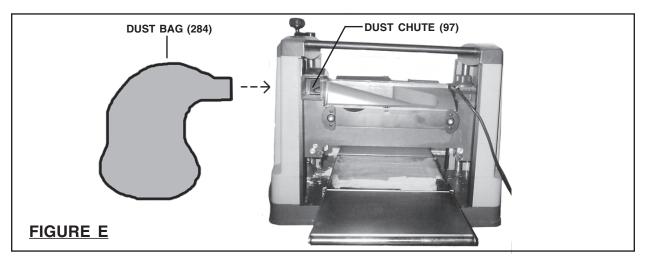
To Attach The Elevation Handle:

- 1. The Manual Elevation Handle (5) needs to be attached to the top/right side of the Planer. (See Figure D, <u>next page</u>.)
- 2. Insert the Manual Elevation Handle (5) onto the top of the Elevation Screw. (See Figure D.)

- 3. Secure the Manual Elevation Handle (5) with a Cap Screw (7). **(See Figure D.)**
 - ELEVATION SCREW
- Insert the Plug (6) into the Manual Elevation Handle (5) to cover the Cap Screw (7). (See Figure D.)

To Attach The Dust Chute And Dust Bag:

1. Slide the Dust Chute (97) over the Fan Cover (100). Secure the Dust Chute to the Fan Cover with a Screw (12). Then slide the Dust Bag (284) onto the Dust Chute. **(See Figure E.)**



PRODUCT FEATURES

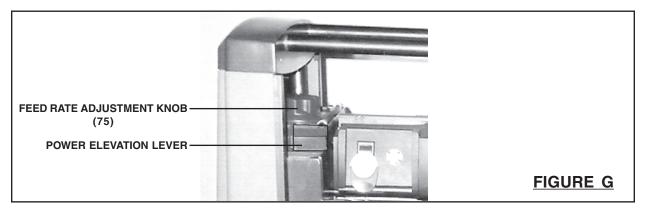
Power Switch (14A): To turn the Planer ON, move the Power Switch to its up position. To turn the Planer OFF, move the Power Switch to its down position. The Planer can be locked from unauthorized use by locking the Power Switch. To do so, turn the Power Switch to its OFF position. Then pull the Safety Key

out of the Power Switch. The Power Switch cannot be turned on with the Safety Key removed. To turn the Power Switch to its **ON** position, the Safety Key must be re-inserted in the Power Switch. **(See Figure F.)**

2. **Circuit Breaker (16A):** The Planer features a Circuit Breaker to protect the Motor from damage due to overheating. The Circuit Breaker will automatically turn off the Planer when excessive current is consumed. If the Circuit Breaker is tripped, turn the Planer off. Wait several minutes for the Motor to cool. Press the Circuit Breaker. Then turn the Planer on to resume cutting. **(See Figure F.)**

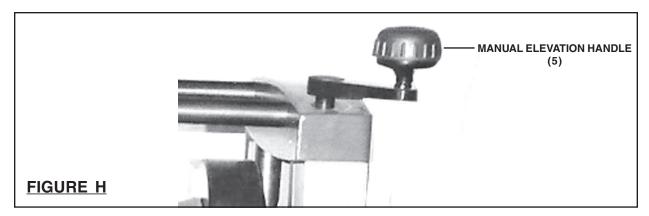


3. **Power Elevation Lever:** The Rollercase (136) contains the Cutterhead (184). The depth of cut is controlled by lowering or raising the Rollercase. For rapid movement of the Rollercase, press up or down on the Power Elevation Lever while the Motor is running. **Do not attempt to engage the Power Elevation Lever while planing. (See Figure G.)**



- 4.. **Feed Rate Adjustment Knob (75):** The Planer has a two-speed gearbox that feeds the workpiece at 22 feet per minute (standard planing) and at 11 feet per minute (for molding or finish planing). The Knob for adjusting the feed rate is located on the left side at the top of the Rollercase (136). **(See Figure G.)**
- 5. **Manual Elevation Handle (5):** The manual elevation Handle allows for more precise movement when lowering or raising the Rollercase (136) to adjust the depth of cut. One complete rotation of the Handle will lower or raise the

Rollercase **1/16**". The manual elevation Handle is located on the top/right side of the Planer. (See Figure H.)



6. **Depth of Cut Gauge (131) and Scale (134):** A Depth of Cut Gauge is attached to the front of the Rollercase (136). The Pointer on the Depth of Cut Gauge displays the depth of cut per pass when the workpiece is positioned below the Gauge. Turning the Manual Elevation Handle (5) moves the Rollercase down and the Pointer shows depth of cut up to 7/64". The Scale with Pointer indicates the finished size of the workpiece.

Recommended Maximum Depth of Cut: Hard/Softwood up to 8" wide = 7/64" Hard/Softwood 8" to 15" wide = 1/16" (See Figure I.)



7. **Thickness Preset Control Knob (279):** A six position Thickness Preset Control Knob is located on the lower/right side of the Planer. This feature allows for quick production of identically sized workpieces. The six settings provided are: 1/8", 1/4", 1/2", 3/4", 1", and 1-1/4".

Example: To plane a 2" thick workpiece down to 1-1/4":

A. Raise or lower the Rollercase (136) until it is just above the workpiece.

- **B.** Position the workpiece on the Planer Extension Table (223) below the Rollercase.
- **C.** Turn the Thickness Preset Control Knob (279) until 1-1/4" is indicated.
- **D.** The Planer is now set to stop the Rollercase (136) when the workpiece REV 07e

thickness reaches 1-1/4".

NOTE: To reset for a different depth stop, raise the Rollercase (136) by about two rotations of the Manual Elevation Handle (5). Then turn the Thickness Preset Control Knob (279) to the desired position. **(See Figure J.)**



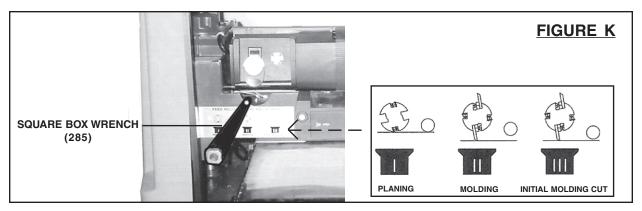
8. **Feed Roller Height Adjustment Knob (123):** The Planer features three height settings for the Feed Rollers (198, 205). The accessory Square Box Wrench (285) is used to adjust the Roller height.

For planing, use setting I.

For molding, use setting II.

For the first molding cut, use setting III.

NOTE: The Feed Roller Height Adjustment setting is indicated by the mark that faces upward on the Roller Up/Down Shaft (124). (See Figure K.)



OPERATING INSTRUCTIONS



Use safety equipment. Always wear ANSI-approved safety impact eye goggles. Dust mask or respirator, and hearing protection must be used for appropriate conditions.

Planing:

- 1. Position the Rollercase (136) to produce the depth of cut desired.
- 2. Align the workpiece on the infeed Extension Table (223) so the workpiece will feed properly.

- 3. Boards longer than 24" should be supported (on both the infeed and outfeed sides of the Planer) by roller stands (not included). **Do not plane boards that are less than 17" long. The force of the cut could split the board and cause kickback.**
- 4. Position the board with its face to be planed on top.
- 5. Plug the Planer into the nearest 120 volt, grounded, electrical outlet. Then turn on the Planer.
- 6. Slowly push the board into the infeed side of the Planer. Slide the board into the Planer until the infeed Roller (205) begins to automatically advance the board through the Planer. Release your grip on the board and allow the automatic feed to completely advance the board. **Do not push or pull on the board.**
- 7. Move to the rear *on one side* of the Planer and receive the planed board as it exits the Planer.

8. **A** CAUTION:

- **A.** Do not stand directly in line with the front or rear of the Planer.
- **B.** Do not grip any portion of the board which has not exited past the outfeed Roller (198).
- 9. Repeat this operation on all boards which need to be the same thickness.
- 10. **NOTE:** The Planer has return Rollers (3) on top of the unit so an assistant can pass the board back to the operator. The assistant must follow the same safety precautions as the operator.
- 11. When finished using the Planer, turn the Power Switch (14A) to its **OFF** position and remove the Switch's Safety Key. Then unplug the Planer from its electrical outlet.
- 12. Make sure to store the Planer in a clean, dry, safe location out of reach of children and other unauthorized people.

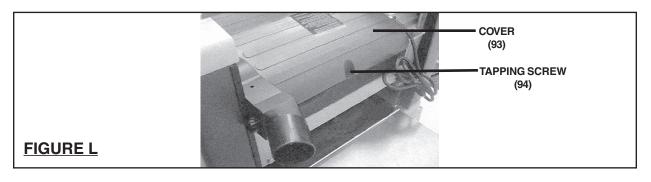
INSPECTION, MAINTENANCE, AND CLEANING

- 1. **CAUTION!** Always make sure the Power Switch (14A) of the Planer is in its "**OFF**" position and the unit is unplugged from its electrical outlet prior to performing any inspection, maintenance, or cleaning procedures.
- 2. **Before each use,** inspect the general condition of the Planer. Check for misalignment or binding of moving parts, cracked or broken parts, damaged electri-

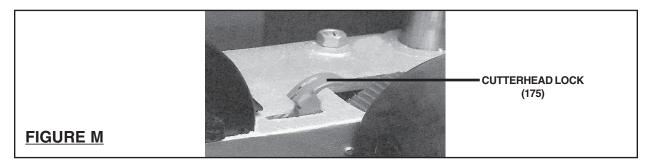
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cal wiring, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use. **Do not use damaged equipment.**

- 3. **To install or reverse planing Knives (173):** The Cutterhead (184) on this Planer has four slots. Two slots are used to hold the planing Knives. To install the planing Knives:
 - A. Make sure to wear heavy duty work gloves to avoid accidental cuts.
 - **B.** Unscrew and remove the Tapping Screw (94) from the Cover (93) on the rear side of the Planer. Then remove the Cover. (See Figure L.)



C. Turn the Cutterhead (184) by hand towards you until it is stopped by the selfengaging Cutterhead Lock (175). **(See Figure M.)**

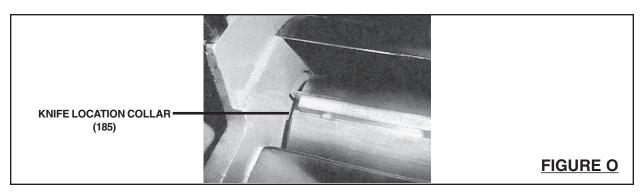


D. Loosen all fourteen Knife Screws (172) on the Cutterhead (184) enough so that the two Knives (173) are loose. **(See Figure N.)**

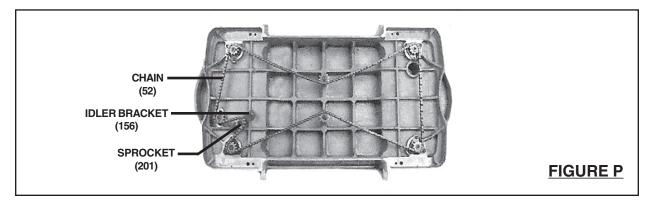


E. Carefully lift the old Knives (173) from the Cutterhead (184), using the two accessory Magnets (288). **NOTE:** The Magnets can be easily disengaged from the Knives by tilting them to the left or right.

F. Reverse the two planing Knives (173), or replace with new Knives and carefully position each Knife on the two Knife Location Collars (185) using the Magnets (288). The Knife Location Collars position the Knife at the proper height. There is one Knife Location Collar at each end of the Cutterhead (184). (See Figure O.)



- **G.** Secure the planing Knives (173) by tightening the fourteen Knife Screws (172). Use a piece of scrap wood to hold the Knives in place while tightening. Tighten the Knife Screws equally so that the clamping force is uniform across the Knives. **(See Figure N.)**
- H. Depress the Cutterhead Lock (175) to release the Cutterhead (184). Release the Cutterhead Lock when the Cutterhead can be turned by hand. Then turn the Cutterhead by hand until it is stopped by the self-engaging Cutterhead Lock. (See Figure M.)
- 4. **To level the Rollercase:** The Planer will produce an uneven depth of cut (tapered cut) if the Rollercase (136) is not parallel with its Base (222). To level the Rollercase with the Base:
 - **A.** Plane a test piece of wood to measure the height of the taper. Then determine which corner or side needs adjustment.
 - **B.** Turn off the Planer and disconnect the unit from its electrical outlet.
 - C. Fold the front and rear Extension Tables (223).
 - **D.** Carefully lay the Planer on its back, so that the bottom of the unit is facing you. (See Figure P.)



- **E.** Loosen the two Head Socket Head Screws (159) on the Idler Bracket (156). Then loosen the Chain (52) by sliding the Idler Bracket. **(See Figure P.)**
- **F.** Carefully rotate the Sprocket (201) by hand to change the Rollercase (136) height. Make sure to leave the other Sprockets untouched. Do not rotate the Sprocket more than one or two teeth. (See Figure P.)
- G. Retighten the Chain (52) by securing the Idler Bracket (156) in position.
 Then tighten the two Head Socket Head Screws (159) on the Idler Bracket (156).
 (See Figure P.)
- **H.** Set the Planer back on its Base (222). Then make a test cut to verify the adjustment.
- 5. **To clean or replace the Carbon Brushes:** It may become necessary to clean or replace the two Carbon Brushes (26A) when the Motor performance decreases, or stops working completely. **The Carbon Brushes are located on each side of the Motor Housing (28A).** To do so:
 - **A.** Remove the two Brush Caps (25A). Then, remove the two Carbon Brushes from the Brush Holders (27A).
 - **B.** If the Carbon Brushes are worn down more than 1/2, replace *both* Carbon Brushes. If, however, the Carbon Brushes are just dirty they may be cleaned by rubbing them with a pencil eraser.
 - **C.** When installing the Carbon Brushes, make sure the carbon portion of the Carbon Brushes contact the Armature (20A) assembly and the springs face away from the Motor. Also, make sure the springs operate freely.
 - **D.** After cleaning or replacement, replace the Brush Caps (25A).
 - E. New Carbon Brushes tend to arc or spark when first used until they wear and conform to the Armature assembly. (See Assy. Diagram.)
- 6. **To clean the exterior/interior of the Planer:** Use compressed air. **Do not immerse any part of the unit in liquid.**
- 7. **CAUTION!** All maintenance, service, or repairs not mentioned in this manual must only be performed by a qualified service technician.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEI-THER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACE-MENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISKS AND LIABILITY ARIS-ING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACE-MENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

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TROUBLESHOOTING

Problem	Possible Cause	Possible Solution
Gouging at ends of board.	1. Dull Knives.	1. Replace Knives.
	2. Inadequate support of long boards.	 Support long boards (over 24") with support stands (not included).
	3. Rollercase not level with base.	3. Adjust rollercase.
	4. Uneven force on cutterhead.	4. Gently push board when board is in contact with only one feed roller.
	5. Boards not butted properly.	5. Butt end to end each piece of stock as boards pass through Planer.
Torn grain.	1. Too deep a cut.	1. Reduce depth of cut.
	2. Dull knives.	2. Replace knives.
	3. Knives cutting against grain.	3. Cut with the grain.
Rough, raised grain.	1. Too deep a cut.	1. Reduce depth of cut.
	2. Dull knives.	2. Replace knives.
	3. Moisture content too high.	3. Use dried wood.
Fuzzy grain.	1. Moisture content too high.	1. Use dried wood.
Uneven depth of cut. (side to side)	1. Rollercase not level with Planer base.	1. Adjust table level.
Rollercase elevation adjusts with difficulty.	1. Elevation screws/columns dirty.	1. Clean and lubricate elevation screws/columns.
	2. Elevation screws worn.	2. Replace elevation screws.
	3. Rollercase not parallel with Planer base.	3. Adjust rollercase.
Board thickness does not match depth of cut scale.	1. Indicator not set correctly.	1. Adjust indicator and tighten securely.
Board feeds inside Planer, but stops Moving past the outfeed roller.	1. Outfeed rollers cannot rotate due to clogging of chips.	1. Clear the clogging. Clean the dust collector system.
	2. Too much pressure on the cutterhead from long workpiece.	 Support long boards (over 24") with support stands (not included).
V-belt slipping.	1. Loose V-belt.	 Have a qualified service technician replace V-belt.
Rollercase cannot be lowered.	 Workpiece thickness gauge setting restricts rollercase movements. 	1. Reset thickness gauge setting.
Excessive fan noise.	1. Large piece of wood in fan housing.	 Remove blade guard and clear housing chamber.
	2. Loose fan.	2. Open blade cover and tighten fan bolt.
Motor overheats.	1. Improper motor cooling.	1. Clean sawdust from motor.
	2. Motor overload.	2. Reduce depth of cut.
Circuit breaker/fuse trips.	1. Dull knives.	1. Replace knives.
	2. Motor overload.	2. Reduce depth of cut.
	3. Improper capacity of circuit breaker/fuse.	3. Use proper capacity circuit breaker/fuse.
Planer will not operate.	1. No power to Planer.	 Make sure Planer is plugged into a working, 120 VAC, grounded, electrical outlet.
	2. Motor overload protection tripped.	2. Reset motor circuit breaker.
	3. Defective switch or wiring.	 Have a qualified service technician repair Planer.

Part #	Description	Qty.	Part #	Description	Qty.
1	Cap (L.H.)	1	81	Eccentric Shaft	1
2	Hex Socket Head Screw	4	82	Bearing	1
3	Roller	2	83	Set Screw	1
4	Special Cap Screw	1	84	Hex Socket Head Screw	8
5	Handle	1	85	Flat Washer	6
6	Plug	1	86	Pan Head Screw	2
7	Cap Screw M5xP0.8x25L		87	Flat Washer	1
8	Elevating Handle	1	88	Exterior Tooth Washer	2
9	Cap (R.H.)	1	89	Tapping Screw	2
10	Grip	2	90	Cable Clamp	2
11	Pan Head Screw	4	91	Tapping Screw	2
12	Screw	3	92	Pan Head Screw	4
13	Weather Board	1	93	Cover	1
14	Dust Proof Board	1	94	Tapping Screw	3
15	Protecting Cover	1	95	Brush	1
16	Flat Washer	2	96	Hex Nut	4
17	Hex Socket Head Screw	3	97	Dust Chute	1
47	Hex Socket Head Screw	1	98	Hex Socket Pan Head Screw	2
48	Flat Washer	1	99	Hex Socket Pan Head Screw	2
49	Sprocket	1	100	Fan Cover	1
50	Idler Seat	1	101	Plug	1
51	Exterior Retainer Ring	1	102	Hex Socket Pan Head Screw	1
52	Chain	1	103	Flat Washer	1
53	Hex Socket Head Screw	5	104	Fan	1
54	Outside Cover	1	105	Fan Shaft	1
58	Sleeve	7	106	Tapping Screw	4
59	Hex Socket Head Screw	2	107	Cord Block	2
60	Gear	1	108	Tapping Screw	2
61	Bushing	4	109	Fixed Plate	1
62	Gear	1	110	Fixed Plate	1
63	Gear	1	111	Pan Head Screw	6
64	Spacer	1	112	Tapping Screw	2
65	Hex Socket Head Screw	2	113	Flat Washer	2
66	Fixed Plate	1	114	Hold Down Plate	2
67	Spindle Washer	5	115	Gear	1
68	Bearing	1		Exterior Retainer Ring	2
69	Shaft	1	117	Gear	2
70	Sleeve	2	118	Block	1
71	Inside Cover	1	119	Gear	1
72	Pinion Gear	1	120	Roller Up/Down Shaft	1
73	Bearing	1	121	Gear	1
74	Pan Head Screw	1	122	Set Screw	4
75	Knob	1	123	Feed Roller Height Adjustment Knob	1
76	Exterior Retainer Ring	1	124	Roller Up/Down Shaft	1
77	Hex Socket Head Screw	2	125	Steel Ball	1
78	Pressure Spring	1	126	Pressure Spring	1
79	Steel Ball	1	127	Pointer Cover	1
80	Set Plate	1	128	Set Screw	1

PARTS LIST - PLANER UNIT

NOTE:

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PARTS LIST - PLANER UNIT (CONT.)

Part #	Description	Qty.	Part #	Description	Qty.
129	Tapping Screw	1	179	Hex Nut	1
130	Flat Washer	1	180	Set Screw	1
131	Pointer	1	181	Hex Socket Head Screw	4
132	Bushing	1	182	Anchor Block	2
133	Pointer Housing	1	183	Key	1
134	Scale	1	184	Cutter Head	1
135	Nut	1	185	Knife Location Collar	1
136	Rollercase	1	186	Bearing	1
137	Pan Head Screw	4	187	Bearing Cover	1
138	Steel Ball	1	188	Hex Socket Head Screw	2
139	Retaining Plate	1	189	Motor Pulley	1
140	Tapping Screw	2	190	V-Belt	1
141	Shaft	1	191	Cutter Head Extend Pulley	1
142	Set Plate	2	192	Hex Socket Head Screw	1
143	Hex Socket Head Screw	4	193	Spacer	1
144	Anti-Kickback Pawl	40	194	Set Block	1
145	Shaft	40	195	Tension Spring	1
146	Magnet	4	196	Compression Spring	4
147	Distance Piece	2	197	Bearing Block	4
148	Flat Washer	2	198	Roller	1
149	Pointer	1	199	Compression Spring	4
150	Exterior Retainer Ring	1	200	Exterior Retainer Ring	2
151	Step Rod	1	201	Sprocket	3
152	Hex Nut	1	202	Chain Protector	1
153	Set Plate	4	203	Set Screw	4
154	Hex Socket Head Screw	8	204	Roller Block	4
155	Bushing	2	205	Roller	1
156	Idler Bracket	1	206	Side Cover (L.H.)	1
157	Pan Head Screw	1	207	Side Cover Frame	2
158	Idler Pulley	1	208	Side Cover Frame	2
159	Hex Socket Head Screw	8	209	Elevating Screw	2
160	Flat Washer	1	210	Column	3
161	Hex Socket Head Screw	1	211	Platen	1
162	Knife Location Collar	1	213	Hex Socket Head Screw	8
163	Flat Washer	1	214	Guide	2
164	Hex Socket Head Screw	1	215	Roller Plate (Left)	2
165	Bearing	2	216	Pan Head Screw	12
166	Spacer	1	217	Hex Socket Head Screw	4
167	Set Screw	1	218	Bushing	4
168	Fan Pulley	1	219	Taper Washer	4
169	V-Belt	1	220	Hex Head Screw	1
170	Gear Shaft	1	221	Hex Nut	1
171	Knife Lock Bar	2	222	Base	1
172	Knife Screw	14	223	Extension Table	2
173	Knife	2	224	Support Roller	2
174	Pressure Spring	1	225	Bushing	4
175	Cutter Head Lock	1	226	Hex Socket Head Screw	4
176	Bushing	1	227	Spacer	4
177	Hex Socket Head Screw	1	228	Roller Plate (Left)	2
178	Cutter Head Pulley	1	235	Idler Bracket	1

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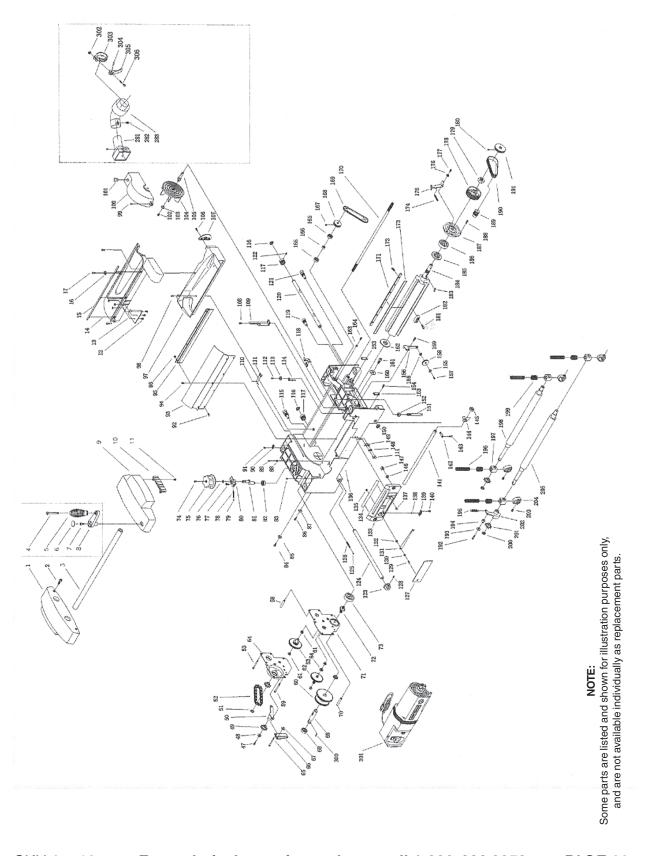
Part #	Description	Qty.	Part #	Description	Qty.
236	Flat Washer	2	267	Step Bracket	1
238	Hex Socket Head Screw	2	268	Steel Ball	1
239	Sprocket	1	269	Pressure Spring	1
240	Bushing	1	270	Set Screw	1
241	Flat Washer	1	271	Locating Plate	1
242	Hex Socket Pan Head Screw	1	272	Spring Pin	1
243	Chain	1	273	Shaft	1
244	Sprocket	2	274	Scale	1
245	Bushing	2	275	Hex Nut	2
246	Flat Washer	2	276	Scale Support	1
247	Hex Socket Pan Head Screw	2	277	Pan Head Screw	2
248	Hex Nut	4	278	Side Cover (R.H.)	1
249	Hex Head Screw	4	279	Preset Depth Control Knob	1
250	Bearing	4	280	Tool Box Cover	1
251	Bearing Retainer	4	281	Dust Chute	1
252	Flange Bolt	12	282	Cap Screw M6xP1.0x25L	1
253	Spindle Washer	4	283	Dust Chute Adapter	1
254	Sprocket	4	284	Dust Bag	1
255	Washer	4	285	Square Box Wrench 26MM	1
256	Hex Socket Pan Head Screw	4	286	Open End Wrench 8/10MM	1
257	Exterior Retainer Ring	4	287	Hex Wrench 4MM	1
258	Set Screw	1	288	Magnet	2
259	Column	1	300	Кеу	1
260	Elevating Screw	1	301	Motor	1
261	Elevating Nut	4	302	Hex Nut M6-1	1
262	Bushing	1	303	Bag Clamp	1
263	Elevating Screw	1	304	Roll Pin 5x20	1
264	Flange Bolt	1	305	Clamp Handle	1
265	Hex Socket Head Screw	2	306	Ring Bolt M6x50L	1
266	Exterior Retainer Ring	1			

PARTS LIST - PLANER UNIT (CONT.)

NOTE:

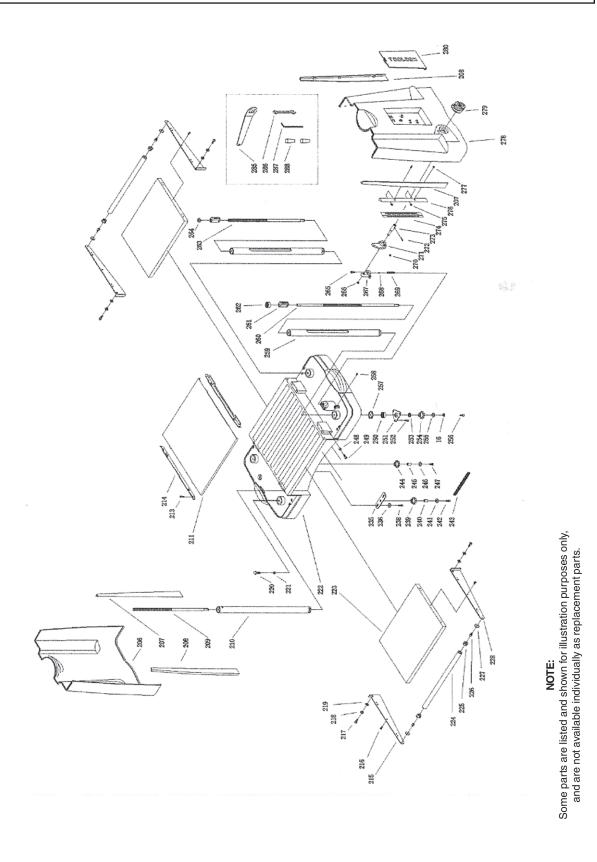
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ASSEMBLY DIAGRAM - PLANER UNIT



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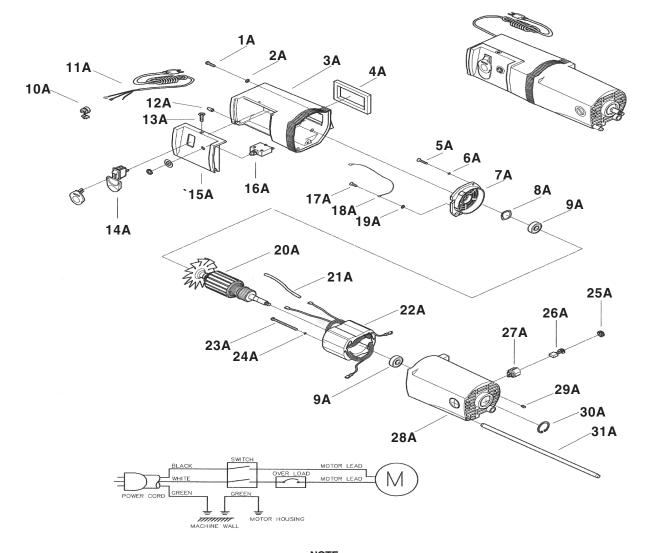
ASSEMBLY DIAGRAM - PLANER UNIT (CONT.)



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PARTS LIST & ASSEMBLY DIAGRAM - MOTOR UNIT

Part #	Description	Qty.	Part #	Description	Qty.
1A	Round Head Screw	3	17A	Tapping Screw	1
2A	Lock Washer	3	18A	Bonding Wire	1
3A	Housing	1	19A	Exterior Tooth Washer	1
4A	Gasket	1	20A	Armature	1
5A	Tapping Screw	3	21A	Sleeve	1
6A	Spring Washer	3	22A	Field	1
7A	End Cover	1	23A	Tapping Screw	2
8A	Wave Washer	1	24A	Spring Washer	2
9A	Ball Bearing	2	25A	Brush Cap	2
10A	Bushing	1	26A	Carbon Brush	2
11A	Power Cord	1	27A	Brush Holder	2
12A	Wire Nut	1	28A	Motor Housing	1
13A	Flat Head Tapping Screw	1	29A	Hex Socket Set Screw	2
14A	Power Switch	1	30A	Interior Retainer Ring	1
15A	Switch Bezel	1	31A	Motor Pivot Rod	1
16A	Circuit Breaker	1			



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IMPORTANT WARRANTY INFORMATION

